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May 10, 2005

Mr. Nabil S. Fayoumi
U. S. EPA - Region 5
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order (UAO) Groundwater Operable Unit
Monthly Report; April 1 - April 30, 2005 Reporting Period

Dear Nabil:

Attached is the Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, Progress Reports. This report is for the period April 1 – April 30, 2005.

Sincerely,

Steven D. Smith
Project Coordinator

cc: Ken Bardo, - U. S. EPA
Mayor Sauget - Sauget, IL
Sandra Bron – IEPA
Mike Coffey - USFWS
Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)
Mayor Frank Bergman – Cahokia
L. Glen Kurowski - Monsanto
Cathleen Bumb – Solutia
Linda Tape - Husch & Eppenberger
Richard Williams – Solutia

Sauget Area 2 Site - Sauget, Illinois

October 3, 2002 UAO – Groundwater Operable Unit

Status Report

Date of Report: May 10, 2005
Period Covered: April 1 - April 30, 2005

Agency Actions / Communications

In an e-mail message dated June 19, 2003, U. S. EPA requested the submission of revised versions of the Focused Feasibility Study, the Remedial Design Work Plan, and the Pre-Final (95%) Remedial Design. The revisions were required to allow the use of a slurry wall rather than jet grouting for construction of the barrier wall. The revised documents were submitted on July 3, 2003. The ESD was issued by US EPA on July 30, 2003. The Final Design Submittals were approved by EPA on October 16, 2003.

Work Performed During the Reporting Period

Slurry Wall

- Approval to move approximately 4,000 cu. yd. of spoil from the slurry wall alignment to the temporary stockpile on the Site R landfill in order to complete the grading of the stockpile was received on March 22nd. Approval to leave the rest of the spoil currently located along the wall alignment in this location was given on March 25th. By the end of April, all of this soil had been transported to the temporary stockpile and the stockpile was close to being complete.
- Grading of the material remaining along the wall alignment was about 80 percent complete by the end of April and spreading of topsoil on the graded spoil had commenced. The results of chemical analyses on a sample of the topsoil were submitted to the Agency's oversight contractor, CH2M Hill, on April 6th and those results were accepted by the Agency on April 14th.
- The results of chemical analyses on a soil sample from a proposed offsite clay borrow source were submitted to CH2M Hill on April 6th. The source was approved for use on April 14th and material will be hauled from this pit to repair the berms around the temporary stockpile, prior to placing the planned synthetic liner over the temporary pile.

Groundwater Treatment

- For the first half of the month, sand content and step tests were being performed on the extraction wells. These tests were completed on April 12th and the system was reset to automatic operation. The results of the sand content testing indicate that the wells have developed an effective filter pack. The average sand content in the groundwater discharge from each of the wells was low even at the highest pumping rate (700 gpm), varying from a high of 1.9 ppm in well EW-1 to a low of 0.01 ppm in well EW-3.
- The river levels were high during the latter part of April and an inward gradient was maintained across the wall at all piezometer locations for the rest of the month.
- As part of the routine maintenance program for the system, the pumps in all of the wells were removed and changed during the week of April 11th.
- A report summarizing the results of the 90-day Interim Operating Period for the GMCS was submitted to the Agency on April 1st. The report also contained recommendations for changes to the criteria used to control the system and recommended that the effectiveness of these changes should be evaluated during a second 90-day Interim Operating Period. The recommended basis for operating the system was to remove the same volume of groundwater that flowed into the slurry wall containment.

  A meeting was held with the Agencies and CH2M Hill on April 20th to discuss the report and conclusions. The EPA agreed with the recommendations in principle, but requested that the locations of the piezometers used to compute the groundwater inflow to the system be moved upgradient of the barrier wall. A suggested piezometer layout was submitted to the Agency on April 22nd. The layout includes four piezometers located immediately upgradient of the eastern boundary of the Site R landfill and four other piezometers located upgradient of these, approximately along the eastern edge of Site Q Dogleg. The layout was approved on April 28th and piezometer installation is scheduled to begin during the week of May 2nd.
- Since the system was shut off for at least half of the month of April during the sand content and pumping tests, logging of daily average data was discontinued until the well testing was complete. However, water level and pumping data are attached for the second half of April.

Schedule

It is currently estimated that the project will be completed by the end of June, assuming no significant weather or material delays.

Submittals During Reporting Period

There were no submittals to the Agency during the reporting period.

Work Scheduled for Next Reporting Period

- Complete well efficiency calculations.
- Install additional 8 piezometers and reprogram the system to remove the same volume of water that enters the barrier wall containment, based on gradients measured between the four upgradient and four downgradient newly installed piezometers.
- Continue pumping and treating groundwater based on piezometric levels until the additional 8 piezometers are installed and the system is reprogrammed
- Complete site restoration.
- Begin installation of the cover over the temporary spoil stockpile.

PUMPING DATA

Date/Time		PUMPING RATE					GROUNDWATER LEVEL (OUTSIDE) COMPARED TO GROUNDW					
		Total Q	EW-1 Q	EW-2 Q	EW-3 Q	SWL	PZ-1_OUTSIDE	PZ-1_INSIDE	Delta	PZ-2_OUTSIDE	PZ-2_INSIDE	Delta
4/15/05	Daily Average	-20.97	-56.28	6.52	0.65	398.04	394.82	391.42	-3.40	396.21	392.79	-3.42
4/16/05	Daily Average	11.23	5.77	5.60	-0.14	399.16	395.62	391.77	-3.85	397.25	393.12	-4.13
4/17/05	Daily Average	11.50	5.97	5.63	-0.10	398.95	395.73	392.03	-3.69	397.08	393.38	-3.70
4/18/05	Daily Average	11.77	6.22	5.66	-0.11	397.91	395.30	392.33	-2.98	396.20	393.63	-2.58
4/19/05	Daily Average	37.64	15.19	18.55	3.91	396.56	394.65	392.37	-2.29	394.97	393.67	-1.30
4/20/05	Daily Average	290.28	132.05	143.00	15.23	395.31	393.94	391.59	-2.35	393.82	393.03	-0.79
4/21/05	Daily Average	524.08	229.95	230.14	63.99	394.55	393.50	390.90	-2.60	393.14	392.45	-0.69
4/22/05	Daily Average	592.52	232.51	239.28	120.73	394.41	393.39	390.75	-2.64	392.98	392.31	-0.66
4/23/05	Daily Average	415.14	165.83	165.76	83.55	394.77	393.53	391.00	-2.53	393.30	392.52	-0.78
4/24/05	Daily Average	72.15	24.65	24.97	22.54	396.13	394.46	392.30	-2.16	394.61	393.70	-0.91
4/25/05	Daily Average	140.49	52.51	52.83	35.15	396.13	394.56	392.36	-2.20	394.64	393.74	-0.90
4/26/05	Daily Average	129.38	48.13	46.83	34.42	396.31	394.68	392.54	-2.14	394.80	393.92	-0.88
4/27/05	Daily Average	168.21	63.92	63.22	41.07	396.20	394.62	392.39	-2.23	394.66	393.89	-0.77
4/28/05	Daily Average	349.64	138.46	137.87	73.31	395.71	394.34	391.96	-2.38	394.21	393.42	-0.79
4/29/05	Daily Average	546.13	220.29	220.22	105.62	395.04	393.96	391.36	-2.60	393.61	392.90	-0.71
4/30/05	Daily Average	725.97	296.17	296.18	133.62	394.18	393.38	390.58	-2.80	392.79	392.18	-0.60

* Data for 4/1/2005 through 4/14/2005 is not available due to pump testing.

'ATER LEVEL (INSIDE)						Additional Piezometers		
PZ-3_OUTSIDE	PZ-3_INSIDE	Delta	PZ-4_OUTSIDE	PZ-4_INSIDE	Delta	PZ-21B	PZ-25B	PZ-29B
395.98	392.55	-3.43	394.57	392.58	-1.99			
396.97	392.93	-4.04	395.36	392.98	-2.38			
396.87	393.22	-3.65	395.45	393.23	-2.21			
396.06	393.32	-2.74	395.08	393.38	-1.70			
394.92	393.27	-1.65	394.45	393.40	-1.05	394.91	395.58	395.85
393.81	392.80	-1.01	393.78	393.13	-0.66	394.71	395.45	395.73
393.18	392.24	-0.94	393.38	392.75	-0.63	394.45	395.26	395.57
393.02	391.88	-1.15	393.21	392.36	-0.85	394.33	395.12	395.37
393.32	392.03	-1.30	393.33	392.43	-0.90	394.26	395.05	395.25
394.62	393.17	-1.45	394.25	393.33	-0.91	394.89	395.64	395.86
394.63	393.25	-1.39	394.35	393.43	-0.92	395.10	395.83	396.06
394.78	393.32	-1.46	394.46	393.51	-0.95	395.17	395.92	396.11
394.65	393.33	-1.33	394.40	393.53	-0.87	378.65	395.88	396.12
394.21	392.98	-1.24	394.16	393.30	-0.86	395.06	395.84	396.10
393.65	392.52	-1.13	393.80	392.96	-0.84	394.88	395.65	395.91
392.85	391.83	-1.01	393.25	392.42	-0.82	394.44	395.23	395.50